



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,746	10/30/2001	Craig D. Sunada	10991022 -8	7701

7590 06/30/2003

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

WILLIAMS, KEVIN D

ART UNIT	PAPER NUMBER
----------	--------------

2854

DATE MAILED: 06/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,746

Applicant(s)

SUNADA ET AL

Examiner

Kevin D. Williams

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Saikawa, marked-up Fig. 7*.

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 4/10/2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent No. US 6,312,178 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Saikawa (US 6,168,270).

Saikawa teaches a media handling system comprising a pick roller structure 111, drive roller structure 141, drive pinch roller structure 142, media path, first guide structure 148 positioned along a first longitudinal edge of the media path and providing a first media guide surface above the sheet when passing along the media path, second guide structure (noted in Fig. 7) positioned along a second longitudinal edge of the media path and providing a second media surface below the sheet when passing along

Art Unit: 2854

the media path, media entrance (Fig. 7) adjacent the pick roller structure and a media exit adjacent the drive roller structure, the first and second guide surfaces positioned such that a distance between the first and second guide surfaces at said media entrance constrains the movement of the trailing edge of the sheet as the trailing edge leaves the pick roller between the pick roller structure and the drive roller structure to minimize trailing edge print effects, the distance being greater at the media exit than at the media entrance and gradually increasing from the entrance to the exit, input tray 110, and output tray 174.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saikawa.

Saikawa teaches the claimed invention except for the distance being in the range of between 0.5mm and 5mm and the distance at the nips being in the range of between 0.5mm and 2mm.

Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges. See MPEP 2144.05 (II)(A). Here the prior art discloses the structure claimed and therefore it would have been

obvious to find the optimum ranges of the distance between the first and second guide structures.

6. Claims 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saikawa in view of Walker (US 5,940,106).

Saikawa teaches the claimed invention except for a plurality of spaced pick roller wheels, a plurality of pinch wheels, and the second guide structure being arranged to constrain and support a sheet of print media at regions between the nips.

Walker teaches a media handling system comprising a plurality of spaced pick roller wheels 70 and a plurality of pinch wheels 72,74.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Saikawa to have the roller structure as taught by Walker since it functions equally as well as the structure disclosed in Saikawa.

Response to Arguments

7. Applicant's arguments filed 4/16/2003 have been fully considered but they are not persuasive.

Applicants' argue that Saikawa does not include a second guide structure positioned along a second longitudinal edge of the media path and providing a second media guide surface below the sheet when passing along the media path. As noted in the attached marked-up figure 7 of Saikawa, the second guide surface is positioned along a second longitudinal edge of the media path and provides a second media guide surface below the sheet when the sheet passes along the media path.

Applicants' argue that Saikawa does not disclose a media path between the first guide structure and the second guide structure having a media entrance adjacent the pick roller structure and a media exit adjacent the drive roller structure. Paper P is stacked in supply unit 110 and is picked and fed by pick roller 111 to the first 148 and second (noted in Fig. 7) guide structures. The first 148 and second (noted in Fig. 7) guide structures form a media entrance (right side in Fig. 7) and a media exit (left side in Fig. 7). The pick roller 111 is on the right side of the guide structures and the drive rollers 141, 142 are on the left side of the guide structures. As can be seen in figure 7, the media entrance is adjacent the pick roller 111 and the media exit is adjacent the drive roller structure.

Applicants' argue that Saikawa does not disclose first and second guide structures at the media entrance that constrain the movement of the trailing edge of the media sheet as the trailing edge leaves the pick roller between the pick roller structure and the drive roller structure to minimize trailing edge print defects. The first and second guide structures, as seen in figure 7, form top and bottom guides for a sheet being fed to the drive rollers. The top and bottom guides constrain and limit the vertical movement of the sheet to the small area provided between the guides. This limitation in the movement of the sheet minimizes trailing edge print defects that would occur if the sheet were fed without top and bottom guides that ensure that any movement of the sheet is limited to the small area between the guides.

Applicants' argue that Saikawa does not disclose a first guide structure and a second guide structure having first and second guide surfaces where the distance is

greater at the media exit than at the media entrance. Figure 7 shows the distance between the first and second guide surfaces expanding up at the media exit. The media entrance starts at approximately the lower most point of guide 148. The distance between the first and second guide surfaces is narrowest at the media entrance and widest at the media exit.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (703) 305-3036. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

KDW
June 17, 2003



ANDREW H. HIRSHFELD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

FIG. 7

